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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/816,908	03/23/2001	Iwao Nozaki	KIT 327	6318

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EXAMINER

PARK, CHAN S

ART UNIT PAPER NUMBER

2625

DATE MAILED: 06/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/816,908

Applicant(s)

NOZAKI, IWAQ

Examiner

CHAN S. PARK

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

DOUGLAS Q. TRAN
PRIMARY EXAMINER

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendment was received on 4/7/06, and has been entered and made of record. Currently, **claims 9-15** are pending.

Response to Arguments

2. Applicant's arguments filed 8/12/04 have been fully considered but they are not persuasive.

In response to applicant's argument regarding the rejection of **claims 9 and 13**, wherein on pages 4 and 5, the applicant explains how the current invention differs from the teaching of Honma. Particularly, the applicant states "Honma's apparatus does not take into account that the image quality of prints should not be lowered in relationship to the resolution of the printer when converting the image data" (page 4 of the remark).

The examiner agrees with applicant, in that the process performed by the current invention is different than what Honma teaches. However, this difference is not apparent in the current claim wording. The claim only recites "a resolution converter operable to lower a resolution of the printing data to a proper resolution where image quality of prints is not lowered in relationship to a resolution of said digital printer". It is noted that the examiner construes the "prints" as the prints printed out from the original printing data referred in line 4 of the claim. Thus, when these "prints" are printed out, it is apparent that the quality of the prints is not lowered in relationship to a resolution of said digital printer. That is, even if the resolution converter lowers the resolution of the

printing data, the image quality of the already printed prints is not lowered in relationship to a resolution of said digital printer.

Therefore, the rejections of **claims 9-15** are maintained and repeated in this Office action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Enomoto Japanese Patent Publication No. 11-234510 in view of Honma U.S. Patent No. 6,476,933.

3. With respect to claim 9, Enomoto discloses a digital photo apparatus (fig. 3) comprising:

- an input device (memory 42) for receiving digitized image data (paragraph 21);
- an image processor (data processing section 46) for processing said image data to generate printing data (printer 16);
- a digital printer for making photo prints from said printing data (printer 16); and
- a data recorder for recording said printing data used by said digital printer on a removable recording medium (storage 58) to be distributed to a customer (paragraph 8), said data recorder including:

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a driver for said removable recording medium (storage 58 in fig. 3 & paragraph 27);

a capacity checker (residue detecting element 62) for detecting an available capacity of said removable recording medium set to said device (paragraphs 20 & 28); and

a resolution converter operable to lower a resolution of the printing data to a proper resolution corresponding to a resolution of said digital printer when said printing data has a volume exceeding said available capacity detected by said capacity checker (paragraphs 20, 28 & 29).

Enomoto, however, does not explicitly disclose the resolution converter for lowering the resolution of the printing data to a proper resolution where image quality of prints is not lowered in relationship to a resolution of said digital printer.

Honma, the same field of endeavor of the digital photo processing apparatus, discloses a digital photo processing apparatus (photocopier in fig. 1) comprising:

an input device (image storing unit 304 or external interface processing unit 209 for receiving image data from host 1000 in fig. 3) for receiving digitized image data (col. 4, lines 58 – col. 5, line 8);

an image processor (both smoothing unit 305 and gamma correction unit 306 in fig. 3) for processing said image data to generate printing data (col. 5, line 55 – col. 6, line 4);

a digital printer (printer unit 204) for making photo prints from said printing data; and

a data recorder for recording said printing data used by said digital printer on a removable recording medium (hard disk 304b in col. 13, lines 61-63), said data recorder including a resolution converter for automatically lowering the resolution of the printing data to a proper resolution (not less than 150 dpi) where image quality of prints is not lowered in relationship to a resolution of said digital printer when said printing data has a volume exceeding an available capacity detected by a capacity checker (col. 10, lines 1-14).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to incorporate the resolution converter of Honma into the digital photo processing apparatus of Enomoto.

The suggestion/motivation for doing so would have been to prevent from printing deteriorated/blotchy image data.

Therefore, it would have been obvious to obtain the invention as specified in claim 9.

4. With respect to claim 13, Enomoto discloses a digital photo processing apparatus (fig. 3) having an input device (memory 42) for receiving digitized image data (paragraph 21), an image processor (data processing section 46) for processing said image data to generate printing data, and a digital printer for making photo prints from said printing data (printer 16), and a drive for recording said printing data on removable recording medium (storage 58 in fig. 3 & paragraph 27), a method of recording said

printing data used by said digital printer on the removable recording medium,
comprising the steps of:

checking an available writing capacity of said recording medium set to said input device (paragraphs 20 & 28);

comparing said available writing capacity detected and a volume of said printing data to be recorded (paragraph 29);

converting resolution of said printing data without substantially lowering image quality when said printing data is not recordable on said printing medium (paragraph 30); and

lowering a resolution of said printing data to a proper resolution corresponding to a resolution of said digital printer when said printing data has a volume exceeding said available writing capacity detected by said capacity checker (paragraphs 29 & 30).

Enomoto, however, does not explicitly disclose the resolution converter for lowering the resolution of the printing data to a proper resolution where image quality of prints is not lowered in relationship to a resolution of said digital printer.

Honma, the same field of endeavor of the digital photo processing apparatus, discloses a digital photo processing apparatus (photocopier in fig. 1) comprising:

checking whether the resolution of the printing data may be converted to a proper resolution (not less than 150 dpi) where image quality of prints is not lowered in relationship to a resolution of said digital printer when said printing data has a volume exceeding said available writing capacity detected by said capacity checker; and

lowering the resolution of the printing data to the proper resolution when the resolution conversion to the proper resolution is possible (col. 9, line 64 – col. 10, line 14).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to incorporate the resolution converter of Honma into the digital photo processing apparatus of Enomoto.

The suggestion/motivation for doing so would have been to prevent from printing deteriorated/blotchy image data.

Therefore, it would have been obvious to obtain the invention as specified in claim 13.

Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Enomoto and Honma as applied to claim 9 above, and further in view of Osawa et al. U.S. Patent No. 6,552,819 (hereinafter Osawa).

5. With respect to claim 10, the combination discloses the digital photo processing apparatus as defined in claim 9 further having a compressor for compressing the image data (paragraph 31), but the combination does not disclose expressly the data recorder including a data compressor for compressing said printing data having the resolution lowered.

Osawa, the same field of endeavor of the digital image printing, teaches the method of detecting the size of the input data and the size of image memory and the

method of converting image data to lower resolution and further compressing the converted data to increase the memory efficiency (col. 7, lines 1-35 and fig. 2).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to implement the method of compressing the already resolution converted image data of Osawa into the digital image printing method of the combination of Enomoto and Honma.

The suggestion/motivation for doing so would have been to further increase the efficiency of the memory size by the compression.

Therefore, it would have been obvious to combine three references to obtain the invention as specified in claim 10.

6. With respect to claim 11, Osawa further discloses the digital photo processing apparatus wherein the compressor is operable with a compression ratio automatically set from a relationship between a volume of said printing data to be compressed and the available capacity of said removable recording medium (col. 7, lines 4-26).

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Enomoto and Honma as applied to claim 9 above, and further in view of Kinjo U.S. Patent No. 6,504,620.

7. With respect to claim 12, the combination discloses the digital photo processing apparatus as defined in claim 9, but the combination does not disclose expressly an attribute data processor for generating order attribute data such as a customer name

and a customer address to be recorded along with said printing data on said removable recording medium.

Kinjo, the same field of endeavor of digital image printing, discloses an attribute data processor for generating order attribute data such as a customer name and a customer address to be recorded along with said printing data on said removable recording medium (col. 5, lines 13-16 & col. 13, lines 20-21).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to implement the attribute data processor of Kinjo into the digital photo processing apparatus of the combination of Enomoto and Honma.

The suggestion/motivation for doing so would have been to correctly identify each individual client using client ID at the digital image printing apparatus (col. 13, lines 17-19 of Kinjo).

Therefore, it would have been obvious to combine three references to obtain the invention as specified in claim 12.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Enomoto and Honma as applied to claim 13 above, and further in view of Osawa.

8. With respect to claim 14, the combination teaches the method as defined in claim 13 but it does not teach expressly a step of compressing said printing data with a compression ratio for enabling recording of said printing data on said recording medium,

when said printing data remains not recordable on said recording medium after the resolution is converted.

Osawa, the same field of endeavor of the digital image printing, teaches the method of detecting the size of the input data and the size of image memory and the method of converting image data to lower resolution and further compressing the converted data to increase the memory efficiency (col. 7, lines 1-35 and fig. 2).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to implement the method of compressing the already resolution converted image data of Osawa into the digital image printing method of the combination Enomoto and Honma.

Since the size of the resolution converted image data can be further reduced by the compression and thus increases the memory efficiency, one would have been motivated to combine Enomoto with Osawa to increase the memory efficiency when the converting a resolution image data does not resolve the insufficiency memory situation (col. 7, lines 22-23 of Osawa).

Therefore, it would have been obvious to combine three references to obtain the invention as specified in claim 14.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Enomoto and Honma as applied to claim 13 above, and further in view of Kinjo.

9. With respect to claim 15, arguments analogous to those presented for claim 12, are applicable.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **CHAN S. PARK** whose telephone number is (571) 272-7409. The examiner can normally be reached on M-F 8am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

csp
June 14, 2006

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Art Unit 2625

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PRIMARY EXAMINER